OIP
AUG 30 2004
PATENT & TRADEMARK OFFICE

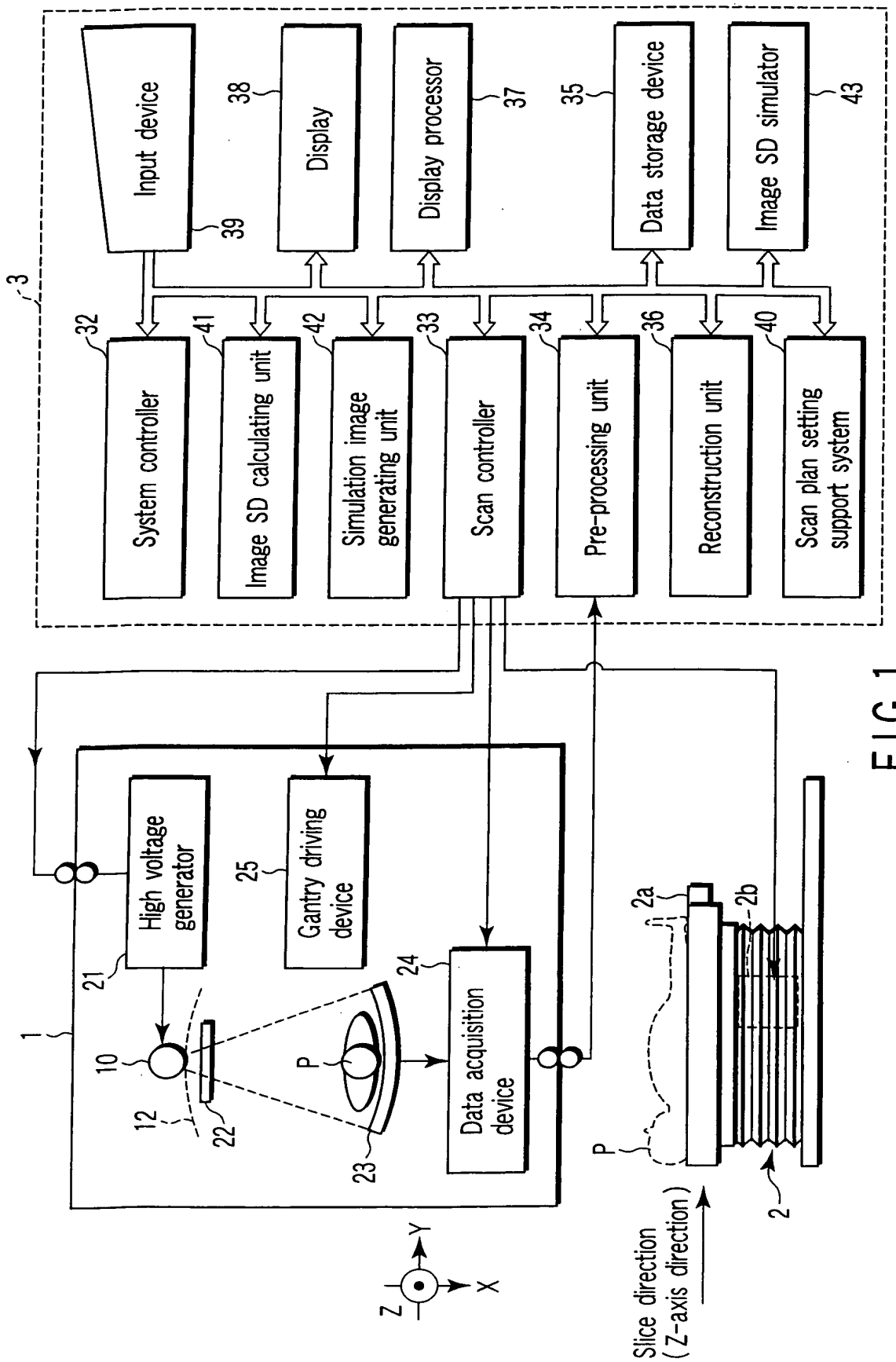

FIG. 1

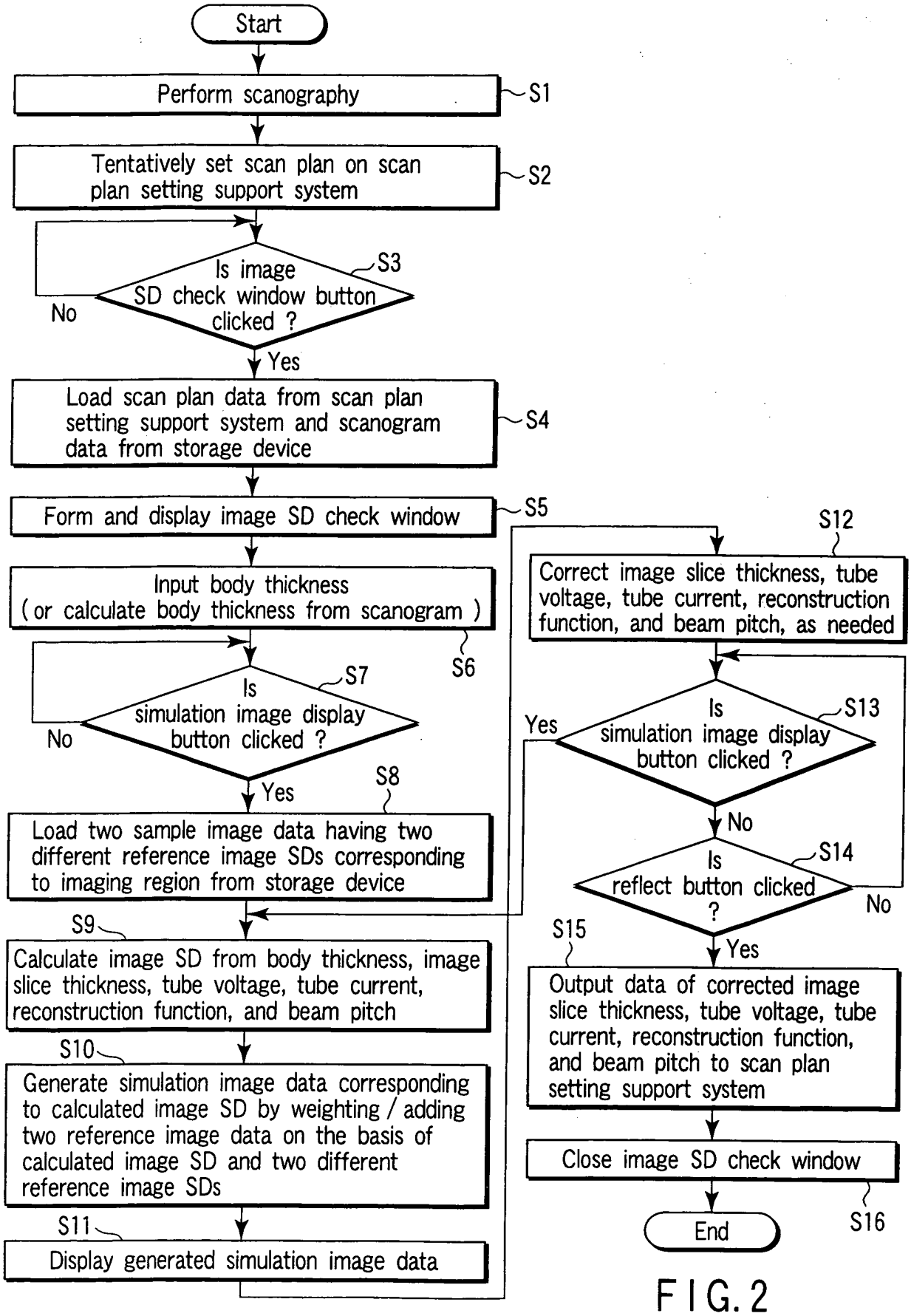
Start
Perform scanography
S1
Tentatively set scan plan on scan plan setting support system
S2
Is image SD check window button clicked ?
S3
No
Yes
Load scan plan data from scan plan setting support system and scanogram data from storage device
S4
Form and display image SD check window
S5
Input body thickness (or calculate body thickness from scanogram)
S6
Is simulation image display button clicked ?
S7
No
Yes
Load two sample image data having two different reference image SDs corresponding to imaging region from storage device
S8
Calculate image SD from body thickness, image slice thickness, tube voltage, tube current, reconstruction function, and beam pitch
S9
Generate simulation image data corresponding to calculated image SD by weighting / adding two reference image data on the basis of calculated image SD and two different reference image SDs
S10
Display generated simulation image data
S11
Correct image slice thickness, tube voltage, tube current, reconstruction function, and beam pitch, as needed
S12
Is simulation image display button clicked ?
S13
Yes
No
Is reflect button clicked ?
S14
No
Yes
Output data of corrected image slice thickness, tube voltage, tube current, reconstruction function, and beam pitch to scan plan setting support system
S15
Close image SD check window
End
S16

FIG. 2

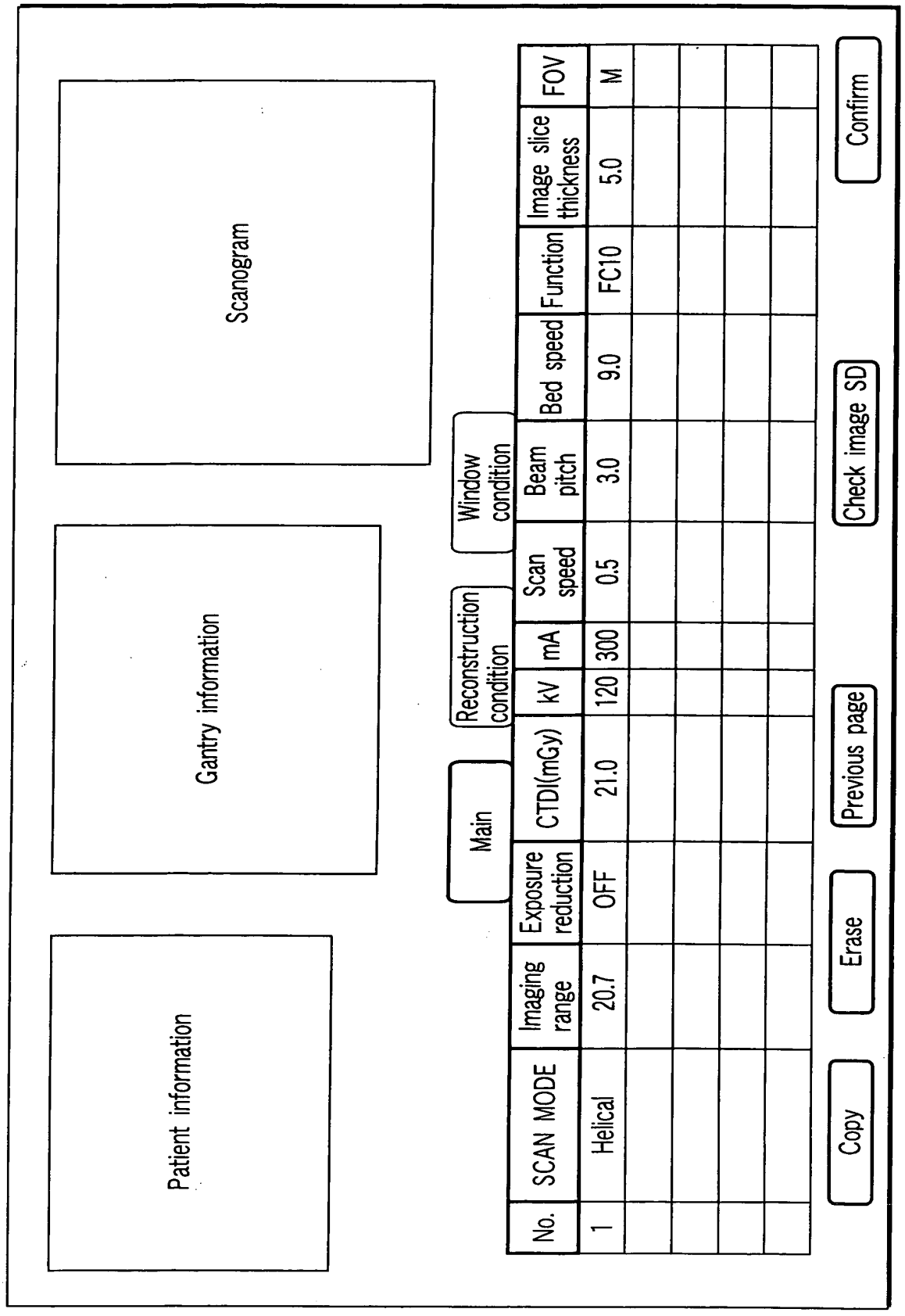
Patient information
Gantry information
Scanogram
Main
Reconstruction condition
Window condition
No.
SCAN MODE
Imaging range
Exposure reduction
CTDI(mGy)
kV
mA
Scan speed
Beam pitch
Bed speed
Function
Image slice thickness
FOV
1
Helical
20.7
OFF
21.0
120
300
0.5
3.0
9.0
FC10
5.0
M
Copy
Erase
Previous page
Check image SD
Confirm

FIG. 3

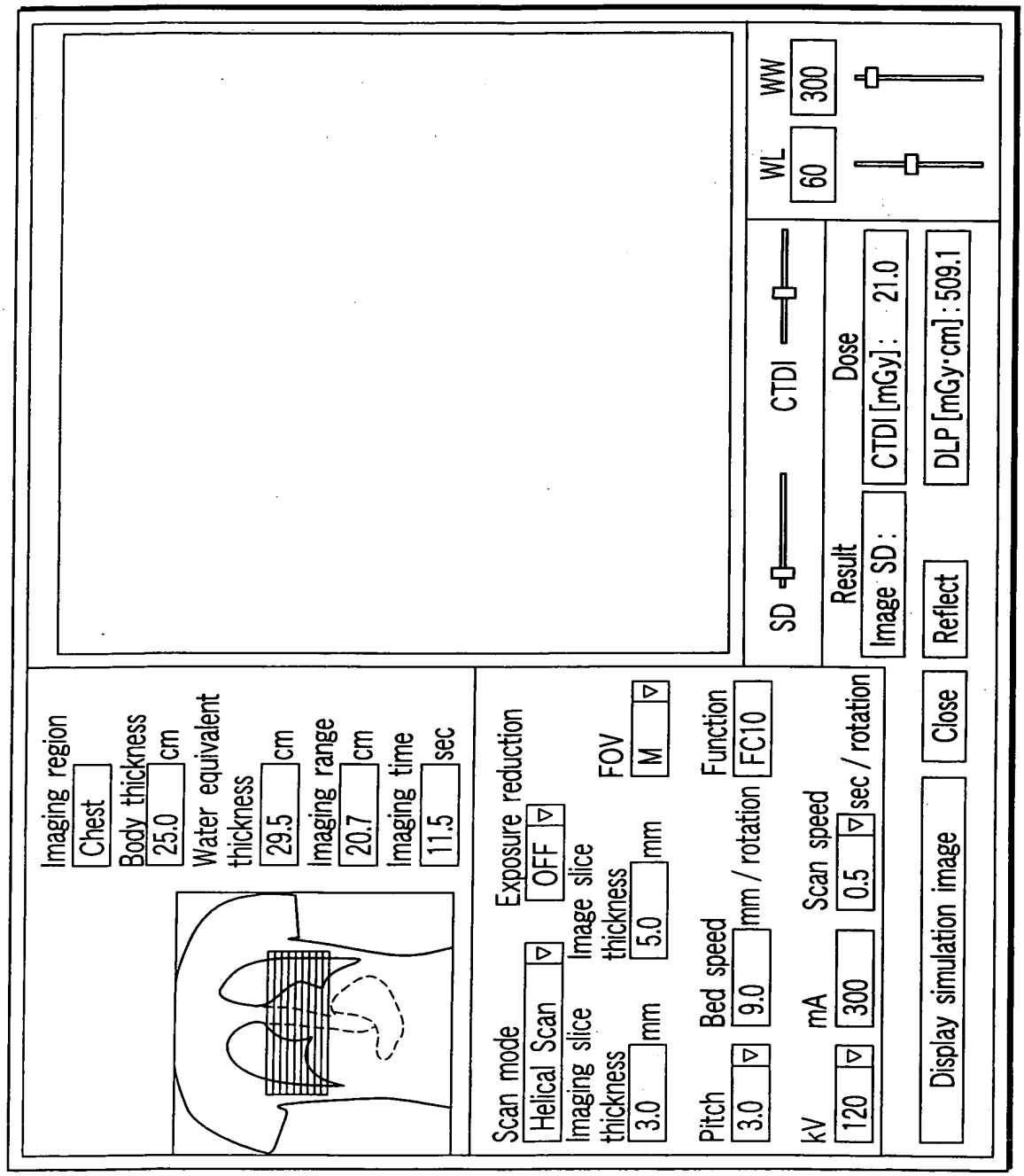
Imaging region
Chest
Body thickness
25.0
cm
Water equivalent thickness
29.5
cm
Imaging range
20.7
cm
Imaging time
11.5
sec
Scan mode
Helical Scan
Exposure reduction
OFF
Imaging slice thickness
3.0
mm
Image slice thickness
5.0
mm
FOV
M
Pitch
3.0
Bed speed
9.0
mm / rotation
Function
FC10
kV
120
mA
300
Scan speed
0.5
sec / rotation
Display simulation image
Close
Reflect
SD
CTDI
Result
Dose
Image SD:
CTDI [mGy]: 21.0
DLP [mGy·cm]: 509.1
WL
60
WW
300

FIG. 4

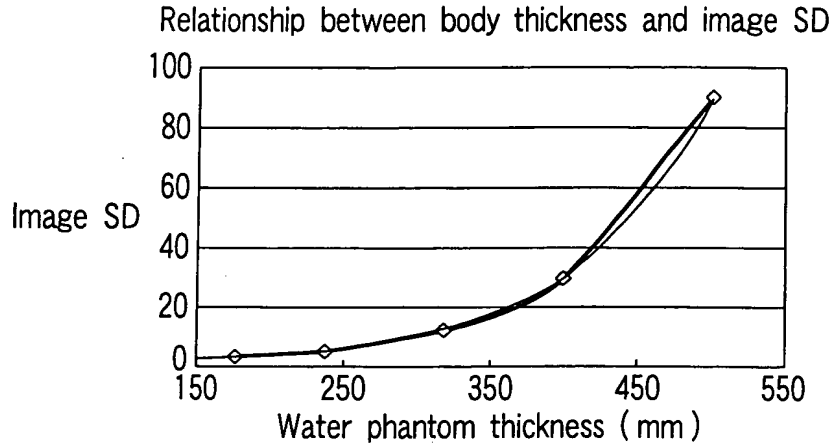

FIG. 5A

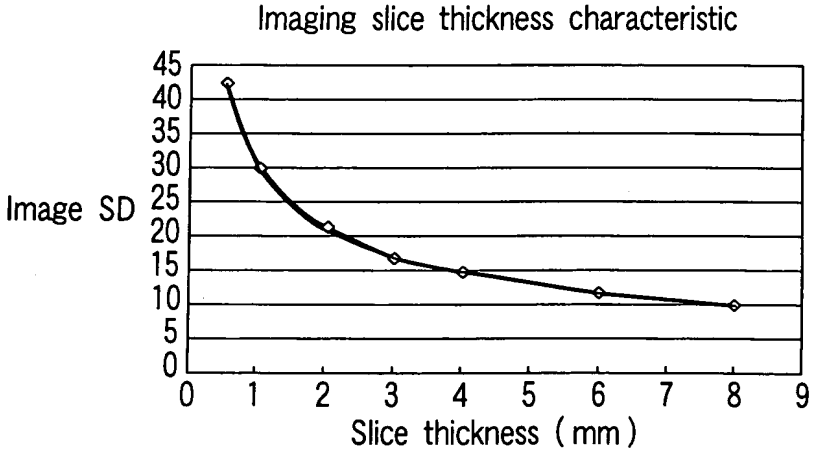

FIG. 5B

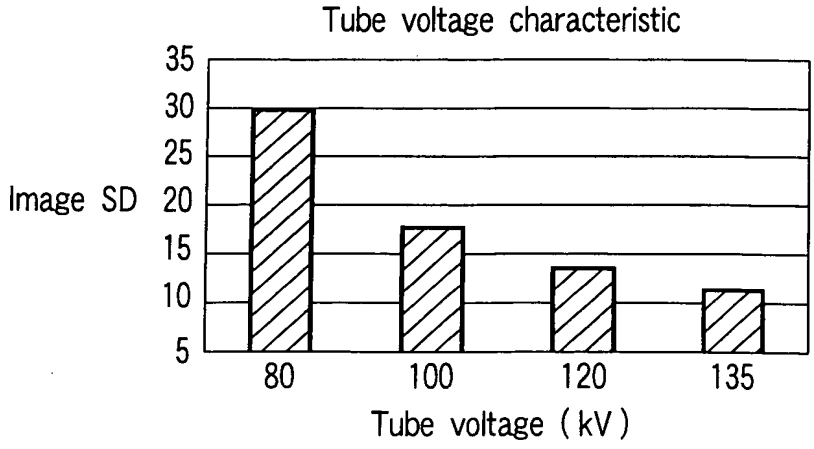

FIG. 5C

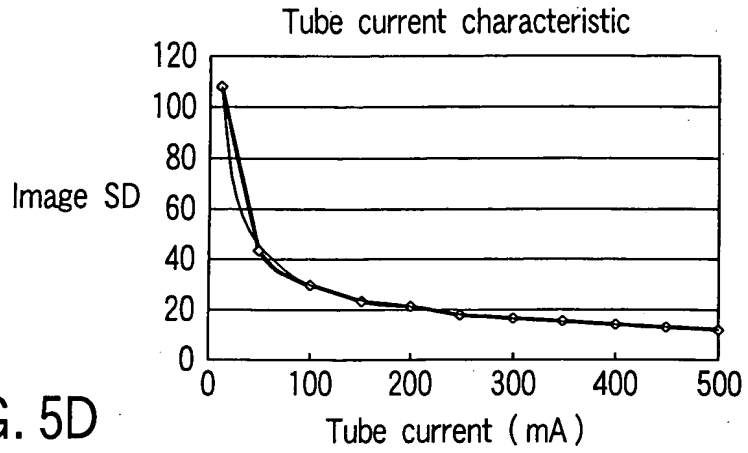

FIG. 5D

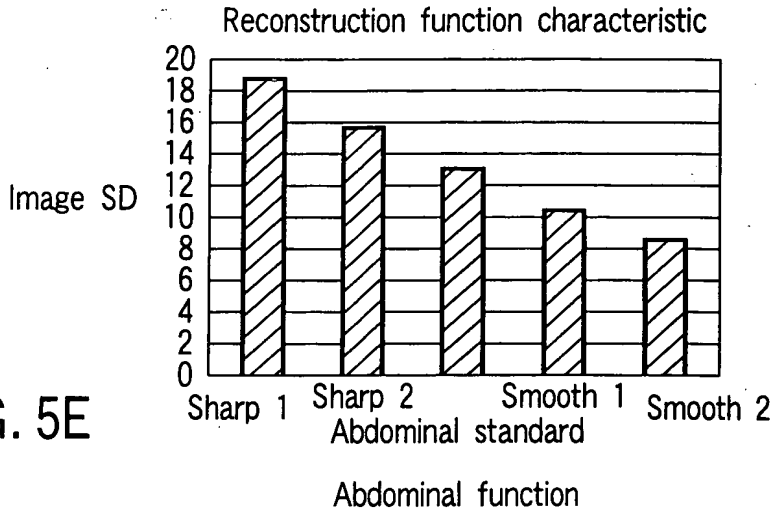

FIG. 5E

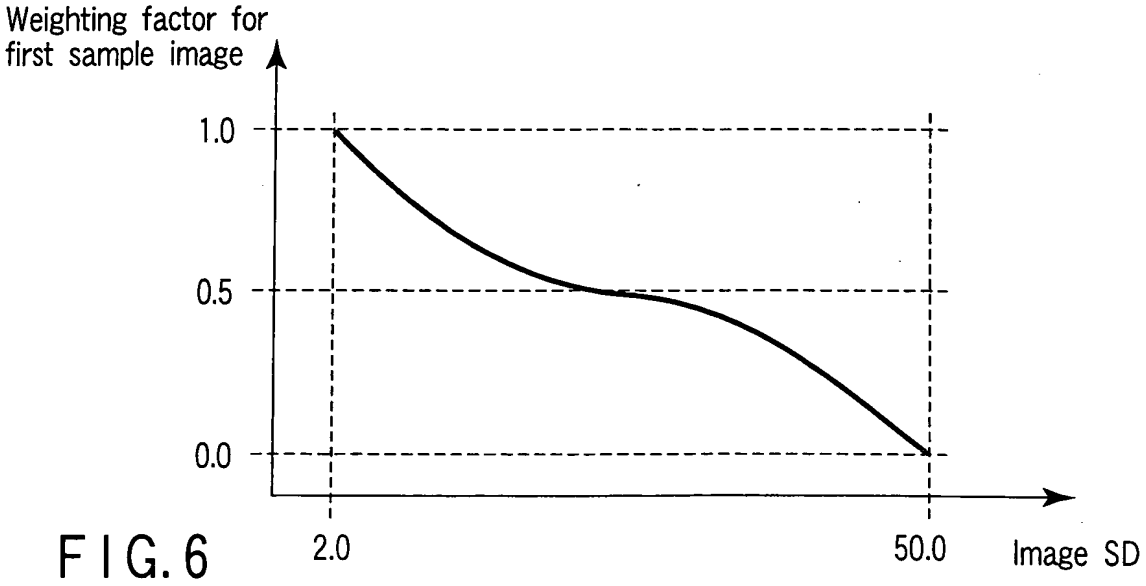

FIG. 6

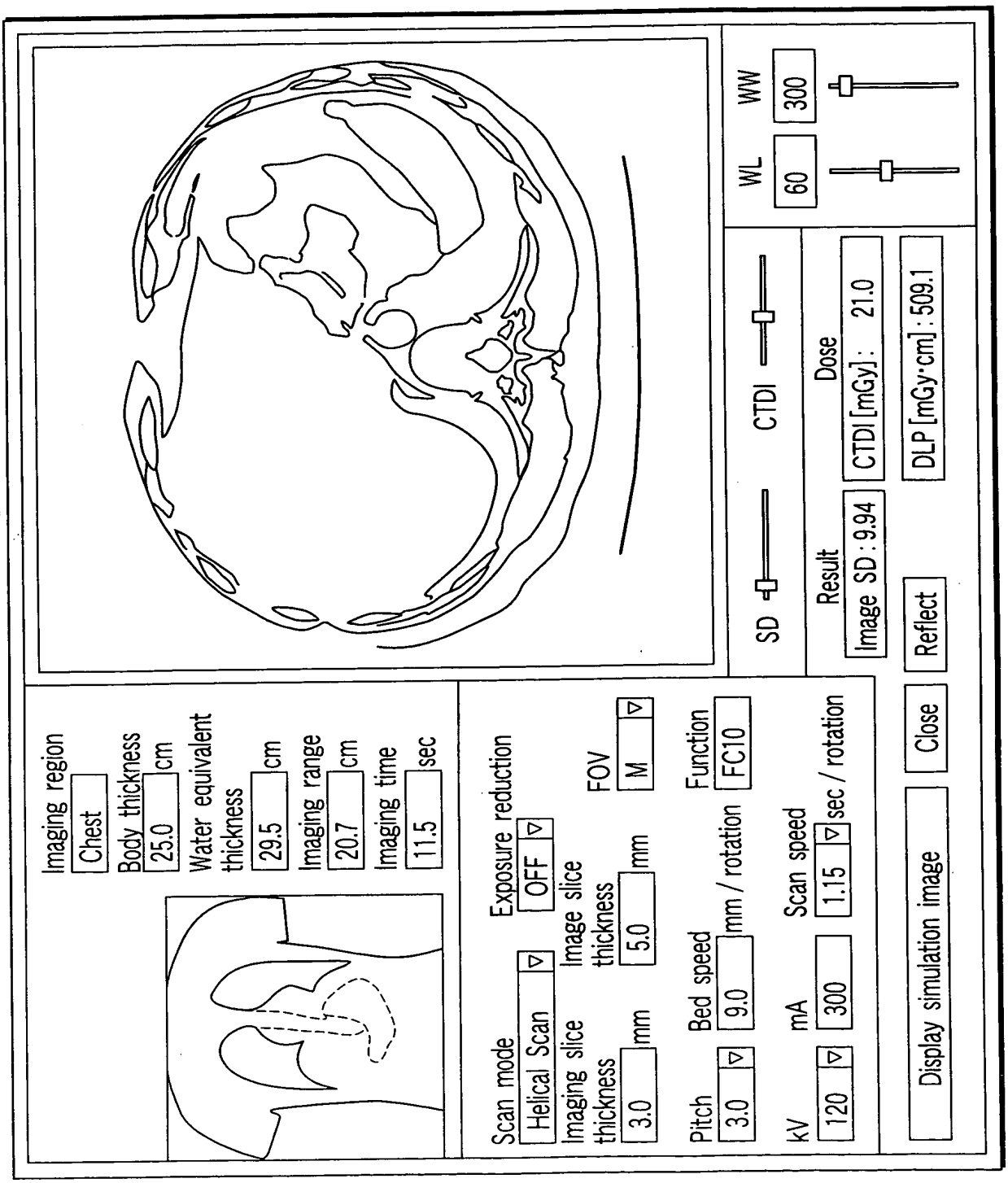
Imaging region
Chest
Body thickness
25.0
cm
Water equivalent thickness
29.5
cm
Imaging range
20.7
cm
Imaging time
11.5
sec
Scan mode
Helical Scan
Exposure reduction
OFF
Imaging slice thickness
3.0
mm
Image slice thickness
5.0
mm
FOV
M
Pitch
3.0
Bed speed
9.0
mm / rotation
Function
FC10
kV
120
mA
300
Scan speed
1.15
sec / rotation
Display simulation image
Close
Reflect
SD
CTDI
Result
Image SD : 9.94
Dose
CTDI [mGy] : 21.0
DLP [mGy·cm] : 509.1
WL
60
WW
300

FIG. 7

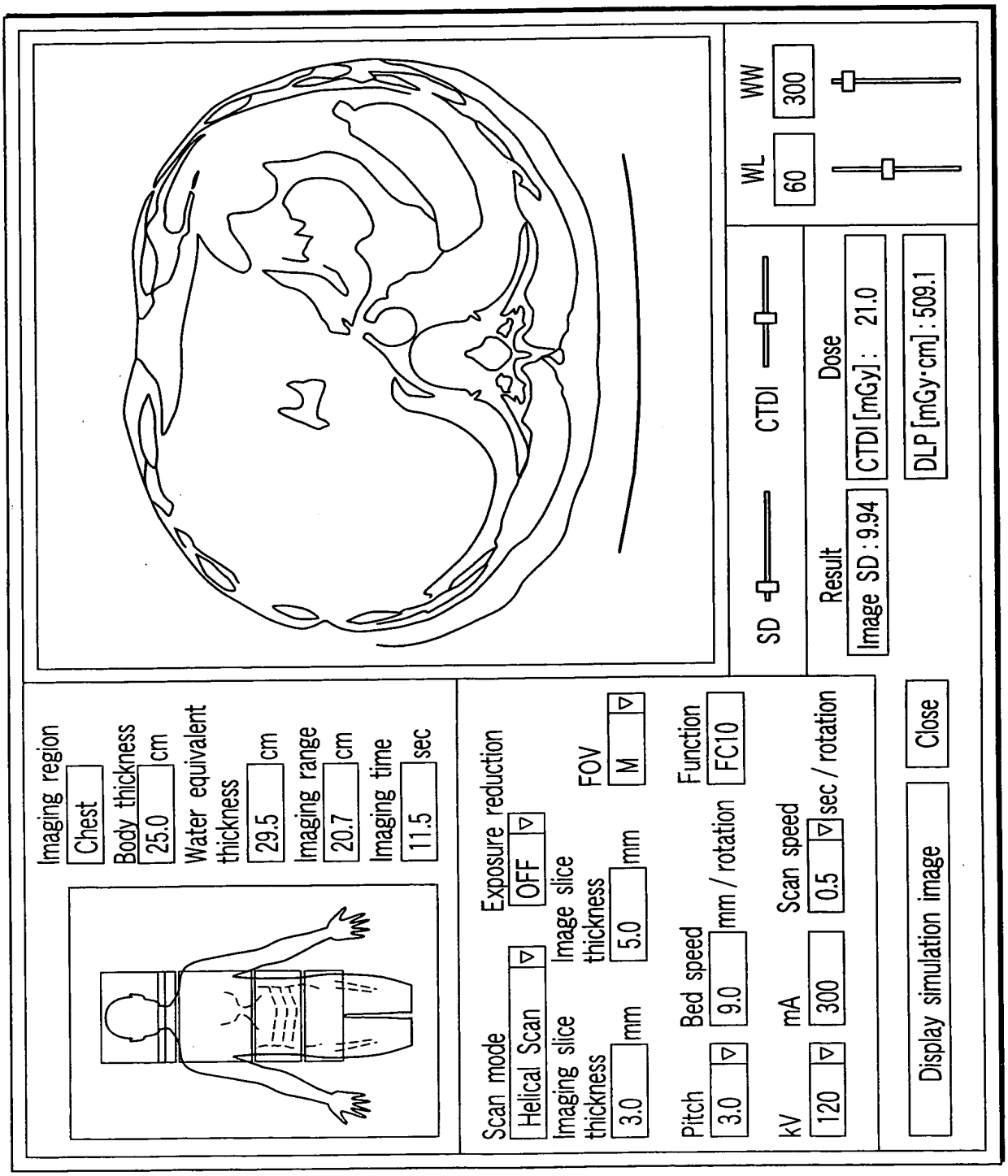
Imaging region
Chest
Body thickness
25.0
cm
Water equivalent thickness
29.5
cm
Imaging range
20.7
cm
Imaging time
11.5
sec
Scan mode
Helical Scan
Exposure reduction
OFF
Imaging slice thickness
3.0
mm
Image slice thickness
5.0
mm
FOV
M
Pitch
3.0
Bed speed
9.0
mm / rotation
Function
FC10
kV
120
mA
300
Scan speed
0.5
sec / rotation
Display simulation image
Close
SD
CTDI
Result
Image SD : 9.94
Dose
CTDI [mGy] : 21.0
DLP [mGy·cm] : 509.1
WL
60
WW
300

FIG. 8